

CLAIM(S):

1. A thin film structure having lateral composition modulations, the thin film structure being formed of at least two components, each of which was simultaneously deposited in a different deposition direction.
2. The thin film structure of claim 1 wherein each of the at least two components was deposited at a deposition angle with respect to vertical in a range of about $\pm 60^\circ$ to about $\pm 90^\circ$.
3. The thin film structure of claim 1 wherein each of the at least two components was deposited at a deposition angle with respect to vertical in a range of about $\pm 75^\circ$ to about $\pm 90^\circ$.
4. The thin film structure of claim 1 wherein each of the at least two components was deposited at substantially similar deposition rates.
5. The thin film structure of claim 1 wherein each of the at least two components was deposited at differing deposition rates.
6. The thin film structure of claim 1 wherein angles formed between deposition directions of each of the at least two components was in a range of about 90° to about 180° .
7. An anisotropic thin film structure having a modulated lateral composition, the thin film structure being formed of a first component and a second component, wherein the first component was deposited in a first deposition direction at a first deposition angle and at a first deposition rate, and wherein the

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second component was deposited in a second deposition direction at a second deposition angle and at a second deposition rate, and wherein the second deposition direction varies from the first deposition direction.

8. The anisotropic thin film structure of claim 7 wherein each of the first and second deposition angles is in a range of about $\pm 75^\circ$ to about $\pm 90^\circ$ with respect to vertical.

9. The anisotropic thin film structure of claim 7 wherein the first deposition rate substantially equals the second deposition rate.

10. The anisotropic thin film structure of claim 7 wherein each the first deposition rate does not equal the second deposition rate.

11. The anisotropic thin film structure of claim 7 wherein an angle formed between the first and second deposition directions is about 180° .

12. The anisotropic thin film structure of claim 7 wherein the modulation in the lateral composition of the thin film is periodic.

13. A method for imparting lateral composition modulations into a thin film structure, the method comprising:

depositing a first component at a first deposition rate in a first deposition direction at a first deposition angle; and
simultaneously depositing a second component at a second deposition rate in a second deposition direction at a second deposition angle.

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14. The method of claim 13 wherein each of the first and second deposition angles is in a range of about $\pm 60^\circ$ to about $\pm 90^\circ$ with respect to vertical.
15. The method of claim 13 wherein each of the first and second deposition angles is in a range of about $\pm 75^\circ$ to about $\pm 90^\circ$ with respect to vertical.
16. The method of claim 13 wherein the first deposition rate substantially equals the second deposition rate.
17. The method of claim 13 wherein each the first deposition rate does not equal the second deposition rate.
18. The method of claim 13 wherein an angle formed between the first and second deposition directions is in the range of about 90° to about 180° .
19. The method of claim 13 wherein an angle formed between the first and second deposition directions is about 180° .
20. A thin film structure formed by the method of claim 13.

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